

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

SUITE 230	PPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
KONNEKER & SMITH P. C. 660 NORTH CENTRAL EXPRESSWAY SUITE 230 COCKS, JOSIAH C ART UNIT PAPER NUM	10/812,583 03/30/2004		Robert S. Glass	RPAK-0009	3224		
660 NORTH CENTRAL EXPRESSWAY SUITE 230 ART UNIT PAPER NUM	20558	7590	10/19/2005	•	EXAM	EXAMINER	
SUITE 230 ART UNIT PAPER NUM				COCKS, JOSIAH C			
DI ANO MY GEORA		I CENTRA	L EXPRESSWAY		ART UNIT	PAPER NUMBER	
PLANO, TX 75074		X 75074		•	3749		

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

•	•		The					
		Application No.	Applicant(s)					
		10/812,583	GLASS ET AL.					
	Office Action Summary	Examiner	Art Unit					
		Josiah Cocks	3749					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Sta	ntus							
	1)⊠ Responsive to communication(s) filed on <u>30 M</u>	arch 2004.						
	This action is FINAL . 2b)⊠ This action is non-final.							
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Dis	sposition of Claims							
	4) ☑ Claim(s) 1-39 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☑ Claim(s) 1-39 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	wn from consideration.						
Аp	plication Papers		·					
	9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 30 March 2004 is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Ex	a)⊠ accepted or b)⊡ objected t drawing(s) be held in abeyance. Se tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).					
Pri	ority under 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
1) [2) [Achment(s) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3/30/04 & 2/14/05.	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:						

DETAILED ACTION

Drawings

1. The drawings filed 3/30/2004 are accepted by the examiner.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 4. Claims 1-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,756,202 to Keith ("Keith") in view of U.S. Patent No. 4,418,650 to Johnson et al. ("Johnson").

Application/Control Number: 10/812,583

Art Unit: 3749

Keith discloses in the specification and Figures 1-3 an invention in the same field of endeavor as applicant's invention and similar to that described in applicant's claims 1-39. In particular, Keith shows a fuel-fired heating boiler (10) including a combustion chamber (15) and multiple pre-mixed gas-fired tubular burners (37) along the bottom of the chamber. The boiler includes a metal outer housing (12) with layers of suitable insulation material (13) (see col. 2, lines 35-36). The boiler also includes a heat exchanger structure with heat exchanger tubes (20) to heat fluid flowing therethrough.

In regard to the recitation of a control device for stagger firing of the burners (e.g. claim 35), Keith shows a control device (38) that would be capable of firing the burners as necessary to heat the fluid in the heat exchanger tubes (20).

Keith possibly does not disclose the particular material and arrangement of the insulation material in including a compressible layer that is specifically a ceramic fiber insulation blanket and a relatively rigid insulation layer that is specifically fiberboard.

Johnson teaches an insulation arrangement that is considered to be pertinent to the problem applicant's invention addresses in providing suitable insulation. Johnson is therefore considered analogous art. In Johnson, the insulation layer is arranged in a boiler or similar combustion device (see col. 2, line 68) and includes a compressible ceramic fiber blanket (60) and a rigid fiberboard layer (56) (see col. 4, lines 33-66).

In regard to the limitations of the claims as to the particular arrangement of the layers with respect to the burners, when this insulation layer of Johnson is provided in the boiler the arrangement is possibly such that the fiberboard is located above the blanket. However, to have arranged these layers such that the ceramic blanket lies beneath the burner and above the

Art Unit: 3749

fiberboard layer would be simply a matter of reversing the layers. As this insulation arrangement of Johnson desirably functions in the same manner and for the same purpose as applicant's invention in providing improved insulation in a boiler (see Johnson, col. 1, lines 7-11) this reversal of parts is not regarded as patentably distinct. See MPEP 2144.04(VI)(A).

Therefore, in regard to claims 1-39, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the boiler of Keith to incorporate the particular insulation structure and arrangement of Johnson for the desirable purpose of insulating components, such as burner components, provided in a boiler from the heat produced (se Johnson, col. 2, lines 31-44).

Conclusion

- 5. This action is made non-final. A THREE (3) MONTH shortened statutory period for reply has been set. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- 6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent Nos. 4,309,165 (McElroy), 4,568,595 (Morris), 4,709,643 (Moreno et al.), and 5,052,311 (Kincaid), and foreign patent documents WO 80/00741 and DE 38 30 884 are cited to further show the state of the art concerning insulation and burner arrangements in combustion devices.

Application/Control Number: 10/812,583 Page 5

Art Unit: 3749

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Josiah Cocks whose telephone number is (571) 272-4874. The examiner can normally be reached on weekdays from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg, can be reached at (571) 272-4828. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://portal.uspto.gov/external/portal/pair. Any questions on access to the Private PAIR system should be directed to the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

icc

October 17, 2005

JOSIAH COCKS

PRIMARY EXAMINÈR ART UNIT 3749